



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,672	12/31/2003	Amir Khan	17316 (DN2799)	9728

7590 12/04/2006
GAF MATERIALS CORPORATION
1361 Alps Road
Wayne, NJ 07470

EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,672

Applicant(s)

KHAN ET AL.

Examiner

Alicia Chevalier

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4, 9 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10, 11 and 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

1. Claims 1-20 are pending in the application, claims 4, 9 and 12 are withdrawn from consideration.
2. Amendments to the claims, filed on September 7, 2006, have been entered in the above-identified application.

REJECTIONS

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Rejections - 35 USC § 102

4. Claims 1-3, 5-8, 10, 11, 13-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Clemens et al. (U.S. Publication No. 2002/0114940 A1).

Clemens discloses a top coating composition (*page 1, paragraph [0020]*) comprising a mixture of a polymeric binder (*page 2, paragraph [0022] and page 4, paragraphs [0114]-[0118]*), heat expandable graphite particles (*page 2, paragraph [0029] and page 8, paragraph [0187]*), a polymeric carrier (*page 2, paragraph [0029]*) and an effective amount of a pigment (*page 2, paragraph [0024]*) that is deemed to be capable of providing a coating that has an initial energy efficiency rating greater than or equal to 0.65 for a low-sloped roof, or an initial energy efficiency greater than or equal to 0.25 fir a steep-sloped roof. The mixture has a solids content from about 50-75% of which 1-10 wt. % is the expandable graphite particles (*page 2,*

Art Unit: 1772

paragraphs [0022]-[0029] and page 8, paragraph [0187]). The mixture may also be cured (page 8, paragraph [0169]).

The polymeric binder is a thermoplastic polymer selected from the group consisting of acrylic or methacrylic polymers or copolymers, epoxy resins and polyvinyl acetate and is present in the mixture in an amount from about 5 to about 60 wt. % (*page 2, paragraph [0022] and page 4, paragraphs [0114]-[0118]*). The polymeric carrier is water (*page 2, paragraph [0029]*). The pigment comprises titanium dioxide, calcium carbonate, colemanite, aluminum trihydrate (ATH), borate compounds or mixtures thereof and is present in the mixture in an amount from about 2 to about 20 wt. % (*page 2, paragraph [0024]*). The polymeric carrier and polymeric binder are deemed to form an aqueous polymeric-based emulsion. The mixture further comprises one or more optional components selected from the group consisting of dispersants, defoamers, fillers, solvents, microbiocides, thickening agents, additional fire retardants, pH modifiers, wetting agents, light stabilizers, and adhesion promoters (*page 2, paragraph [0029]*).

Clemens discloses further discloses a roofing product comprising a substrate and a top coat as discussed above. The substrate comprises single ply membranes, built-up roofing (BUR), modified bitumen, ethylene propylene diene monomer rubber (EPDM), standing-seam profile, shingles, clay, concentrate, fiber cement tile, slate, shakes, architectural profiled metal or individual roofing components (*page 3, paragraph [0060] through page 4, paragraph [0094]*). The substrate surface is deemed to have a slope of 2:12 inches or *less*, since figure 1 show the substrate to have no slope, i.e. 0.

ANSWERS TO APPLICANT'S ARGUMENTS

5. Applicant's arguments in the response filed September 7, 2006 regarding the 35 U.S.C. 102(b) over Clemens et al. of record have been carefully considered but are deemed unpersuasive.

Applicant argues that Clemens does not recite each and every element of claim arranged as in the claim. Specifically Applicant points out that Clemens does not recite a pigment capable of providing a coating that has an initial energy efficiency rating greater than or equal to 0.65 for a low-sloped roof, or an initial energy efficiency greater than or equal to 0.25 for steep-sloped roof.

Regarding the phrase "capable of," it has been held that the recitation that an element is "capable of" performing only requires the ability to so perform. Also, while Clemens does not explicitly teach "pigment capable of providing a coating that has an initial energy efficiency rating greater than or equal to 0.65 for a low-sloped roof, or an initial energy efficiency greater than or equal to 0.25 for steep-sloped roof," it is reasonable to presume that Clemens' top coating would meet the above limitation because Clemens' top is substantially identical in composition and structure to Applicant's disclosed top coating. MPEP § 2183. Furthermore, Applicant requires a white pigment (*specification paragraph [0026]*) in the range of about less 15% and Clemens also requires a white pigment (*Clemens [0019]*) and up to 50% coloring pigment (*Clemens [0024]*). Since Clemens requires a white pigment in an overlapping range Clemens' pigment is deemed capable of providing a coating that has an initial energy efficiency rating greater than or equal to 0.65 for a low-sloped roof, or an initial energy efficiency greater

Art Unit: 1772

than or equal to 0.25 for steep-sloped roof, unless Applicant provides evidence that Clemens' pigment is incapable of meeting the functional language in claim 1.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

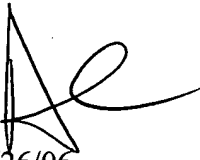
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 1772

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ac
11/26/06



**ALICIA CHEVALIER
PRIMARY EXAMINER**